HIV/AIDS TEACHING KIT

A Resource for
Public Health Nurses
and Other Health Care Professionals

Manitoba
Health

100-05007/

BODY FLUIDS

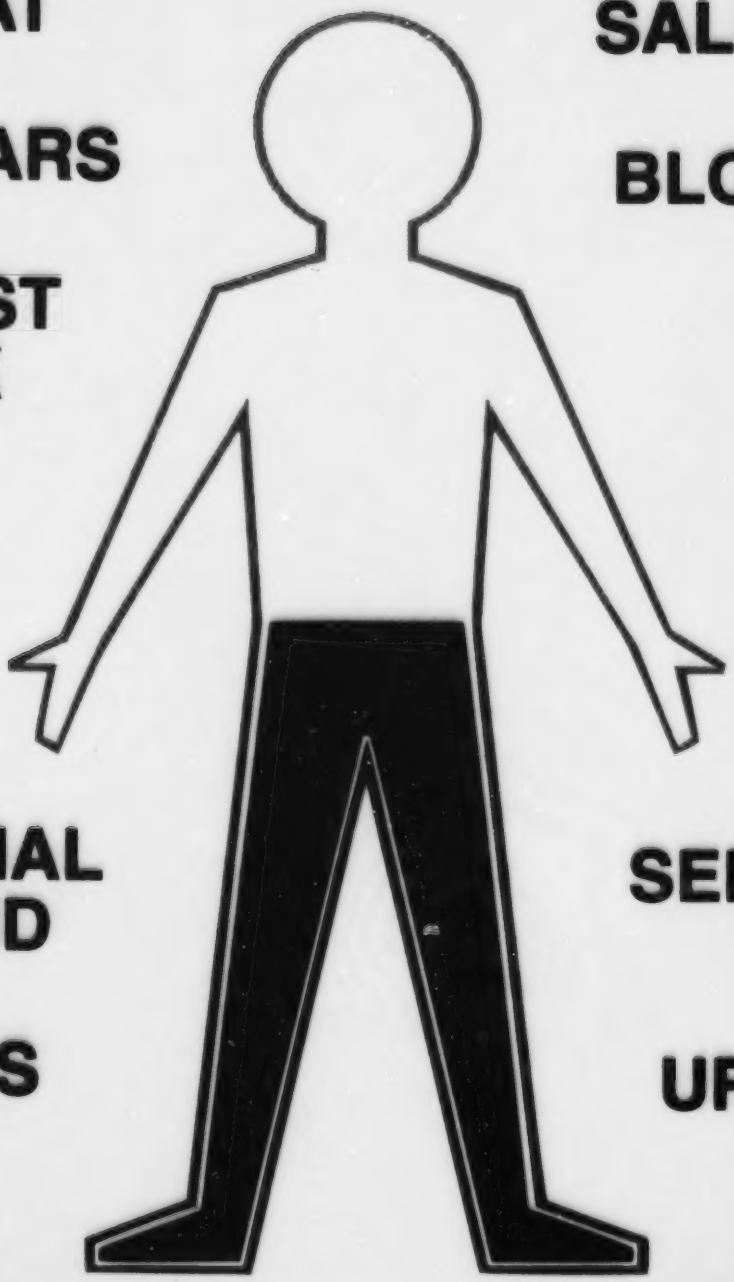
SWEAT

TEARS

BREAST MILK

SALIVA

BLOOD



VAGINAL FLUID

FECES

SEMEN

URINE

Manitoba Health

BODY FLUIDS

The HIVirus (Human Immunodeficiency Virus) targets the human immune system.

The first poster in this series identifies various kinds of body fluids. It also shows that the focus of preventing sexually transmitted diseases or STDs is below the belt — in the blue area.

Many STDs are transmitted by body fluids. This means we need to think about our sexual practices. On the poster, vaginal fluid (women's sex fluid), semen (fluid that comes from the man's penis during sex), blood and breast milk are highlighted in red to show that they are body fluids where HIV is found in high concentrations. This is important because it is key to understanding how HIV is spread.

HIV is transmitted most commonly through unprotected sex with an infected partner. A person can also become infected through blood-to-blood contact that may occur when sharing equipment (such as syringes for injection drug use), with someone who has HIV. Sharing equipment for tattooing and body piercing without proper cleaning also places a person at risk for HIV and other blood-borne infections such as Hepatitis B and C.

The HIVirus has also been found in other body fluids like sweat, tears, saliva, feces and urine. However, there is not enough of the virus present in these sources to cause infection.

Remember, sex fluids and blood-to-blood contact are the main sources of virus transmission. This means menstrual blood (periods) and breast milk from an infected woman are a risk for her partner. If an infected mom breastfeeds her baby, she runs the risk of passing on HIV on to her child.

Remember: HIV infection is preventable.

Illustration: Albert McLeod© 1996

HEALTH

COMMON COLD
INFLUENZA
MEASLES

HIVirus

Manitoba
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HEALTH

Protect your immune system from the HIVirus to stay healthy.

Viruses are the smallest infectious particles known to science — a lot smaller than bacteria. They need to get inside a living cell to reproduce themselves. HIV is the kind of virus that infects cells in the immune system and kills them, leaving the body with little or no protection against disease or infection.

The blue dotted line in this poster represents the body's immune system. A strong, healthy immune system protects our bodies like a suit of armour. When we come in contact with germs (viruses, bacteria), our immune system goes to work. For example, if a healthy person gets a virus like the common cold, that person will probably be sick for only a few days because their immune system is able to fight off or control the virus.

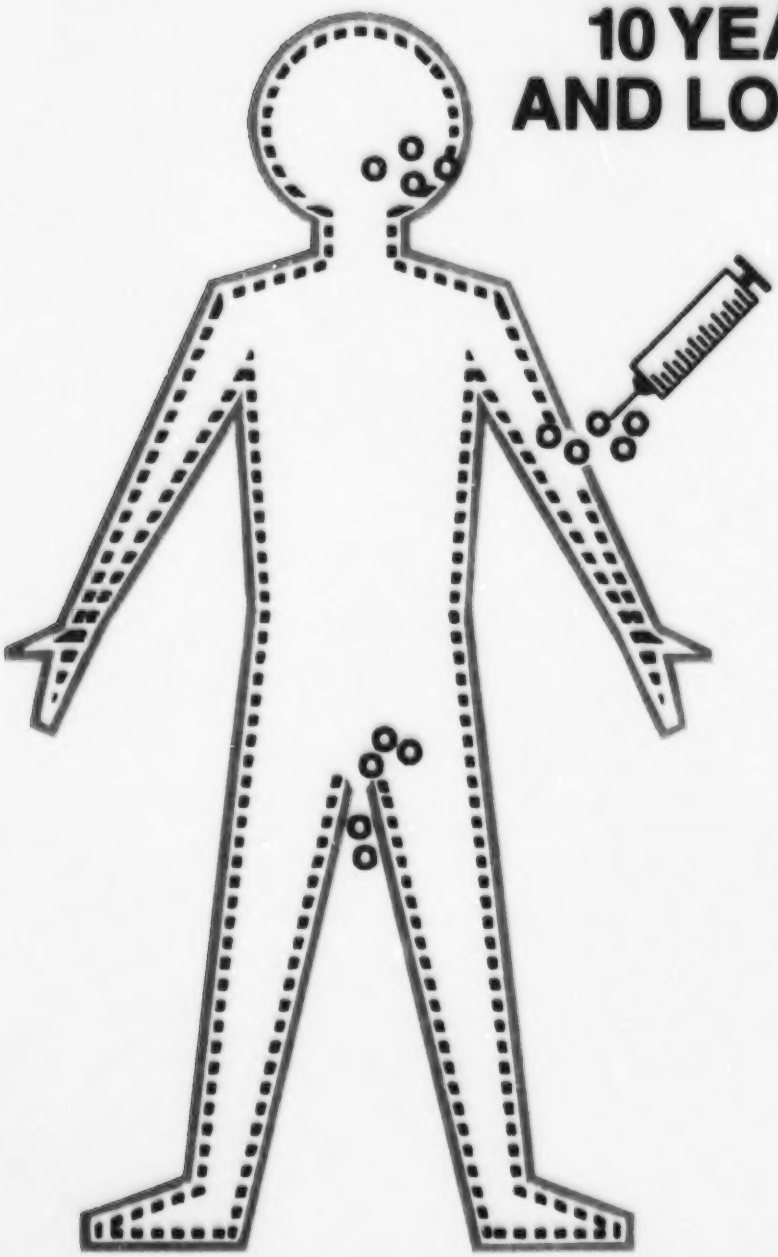
It is important to know that HIV is a very different type of virus from familiar ones like the common cold, flu and measles. The small red circles on this poster represent the HIVirus outside the body. This reminds us of the purpose of prevention workshops like this one. We must know about HIV and how it is transmitted, to keep the virus on the outside and stay healthy within.

Stay HIV (-) negative and stay healthy!

Illustration: Albert McLeod© 1996

HIV ENTERS BODY

LOOK AND FEEL HEALTHY 10 YEARS AND LONGER



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HIV ENTERS THE BODY

The HIVirus is a parasite that can fool the body for a long time.

This poster shows how people can become infected:

- through unprotected sex (vaginal, anal and oral) with someone who is infected with HIV;

  and

- by sharing drug-related equipment like syringes with someone who is infected with HIV.

(A mother can also pass on HIV to her unborn baby. More about this follows on poster #5.)

When a person is first infected (sero-conversion), he or she may have general symptoms such as fatigue, achy bones or headaches — the same kinds of symptoms common with a lot of other infections. These symptoms usually go away after a week or so. The problem is, people are highly infectious for the first 60 days after they get HIV. This is the time when people can't possibly know if they have the virus (because they likely have no symptoms at this point). In fact, when you are infected with the HIVirus, you can look and feel healthy for an average of up to 10 years before you start to show symptoms of the infection.

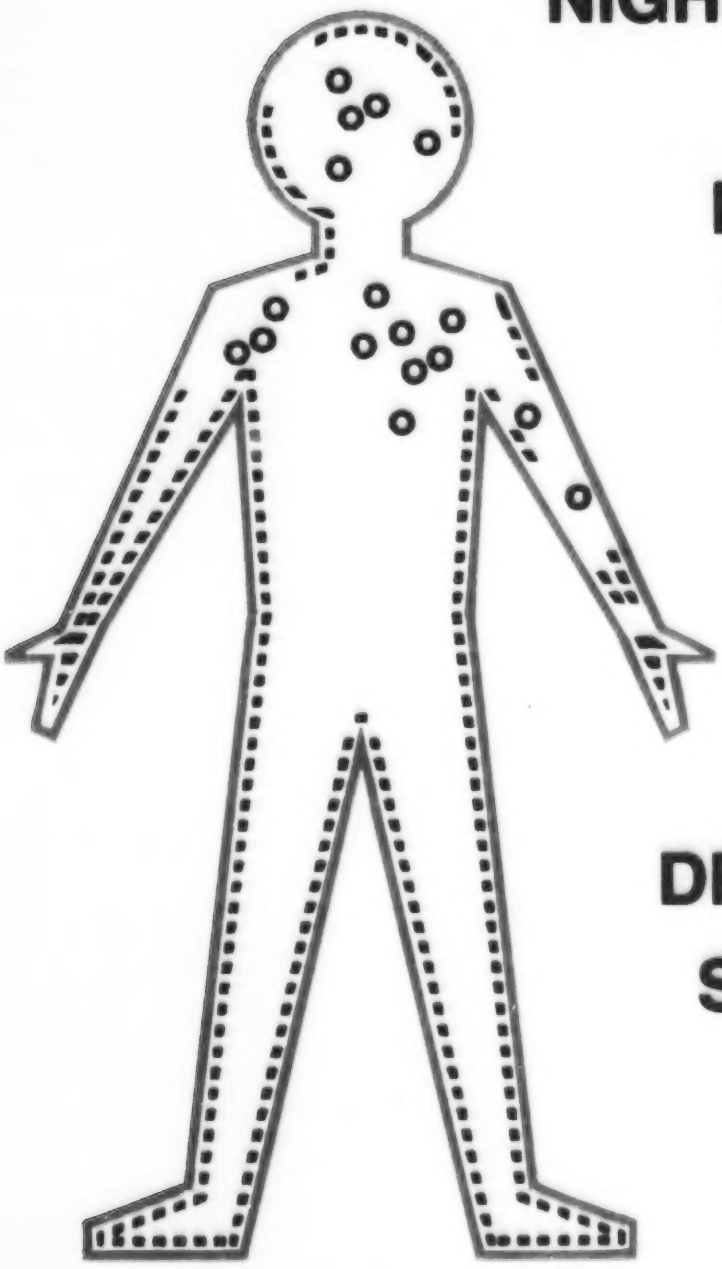
How can people protect themselves against getting HIV from a sexual partner? One way is always to use a male or female condom, particularly if you suspect your partner is having sex with others. Once infected with HIV, there is always a chance that you will pass the virus on to others through unprotected sex, by sharing syringes, and if you are a woman, to your unborn child.

People who have shared syringes, or have had unprotected sex with several partners, should go for HIV testing. An HIV antibody blood test can show if you are infected with HIV; however, it takes about three to six months before evidence of infection shows up in your blood.

Once the HIVirus gets into your body,
it starts a process called HIV disease.

Illustration: Albert McLeod© 1996

HIV INFECTION



NIGHT SWEATS

FATIGUE

DIARRHEA

SWOLLEN GLANDS

WEIGHT LOSS

THRUSH

FEVER

DRY COUGH

SKIN RASH

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HIV INFECTION

The HIVirus eventually destroys the immune system.

Once HIV is inside the body, it begins to affect the immune system. It can take years for the immune system to be damaged but, in time, the infected person will begin to show signs that something is wrong. These symptoms will come and go and, because they seem like common symptoms of other infections, it can be difficult to identify them as HIV-related. If these symptoms start to show up in a person who seems healthy, that person should have an HIV antibody blood test.

On this poster, the blue dotted line is no longer intact. Over several years, as the virus kills immune system cells, the body works to replace them. However, the body's immune system will eventually fall behind and there will be fewer and fewer of these important cells. When this happens, a person may experience some of the following symptoms:

Night Sweats - The body sweats so much that it soaks the sheets, with or without an accompanying fever.

Fatigue - You feel more tired than usual during everyday activity, even after a good night's rest.

Diarrhea - Loose, runny bowel movements several times a day for several days or weeks.

Swollen Glands - Enlarged lymph glands in the neck, groin, or armpit. These feel lumpy and may be sore or tender to touch.

Weight loss - A loss of several pounds without dieting or changing your eating habits. It is often sudden and there's no clear reason for the weight loss.

Thrush - Sores or white patches on the gums, tongue, or roof of the mouth. Babies without HIV will sometimes get thrush and this can be easily treated. But in adults with HIV, it lasts longer and is harder to clear up.

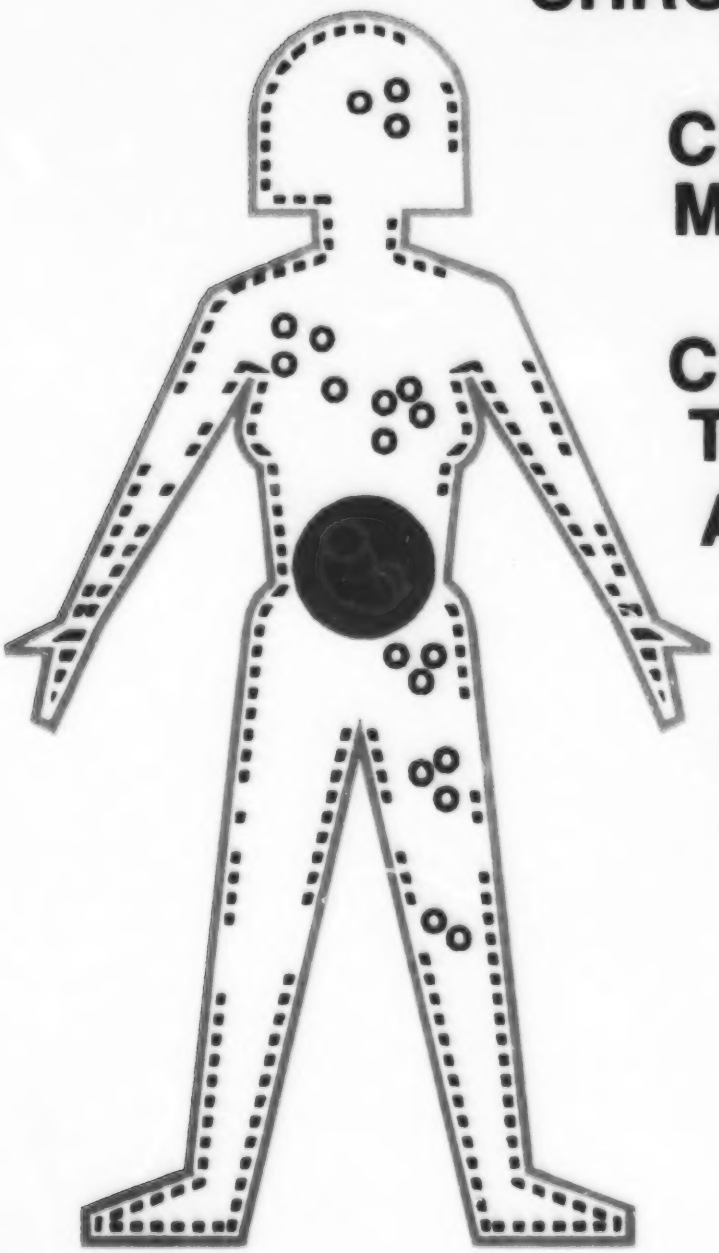
Fever - Long-lasting fever, usually without illness present, that doesn't get better with medication.

Dry cough - A dry cough lasting several days or more in the absence of an illness, such as a cold.

Skin rash - Itchy bumps or ulcers, appearing anywhere on the body, that often spread.

Illustration: Albert McLeod® 1996

WOMEN AND HIV



CHRONIC YEAST INFECTION

CHANGES IN MENSTRUAL CYCLE

CHANGES IN THE CERVIX

ABNORMAL PAP TEST

25-30%* INFECTION RATE FOR BABY

*THIS DECREASES TO 10% IF MOM TAKES TREATMENT FOR AIDS DURING PREGNANCY

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WOMEN AND HIV

Women experience the same symptoms as men — and more.

Women can become infected with HIV the same way as men. When their immune systems are damaged, they have the same symptoms as men plus additional symptoms that only women can have. This is because the female reproductive system is different from the male reproductive system. Symptoms that occur only in women are:

CHRONIC YEAST INFECTIONS
Most often, this the first sign of HIV infection in women. Symptoms include thick, odourless, white or yellow vaginal discharge and raised white or grey patches in the vagina. Often the yeast infection keeps coming back and gets harder to clear up (cure) with medication.

CHANGES IN MENSTRUAL CYCLE
HIV-positive women tend to have irregular periods, unusually heavy or light periods, or show an increase in pre-menstrual symptoms such as breast pain, swelling, anxiety, depression and cramps.

ABNORMAL PAP TEST
Women with HIV infection are more likely to have abnormal PAP tests. This is often a sign of pre-cancerous or cancerous cells in the cervix. To detect changes in the cervix as early as possible, HIV-positive women should have a pelvic exam at least once a year, to prevent the development of full-blown cervical cancer.

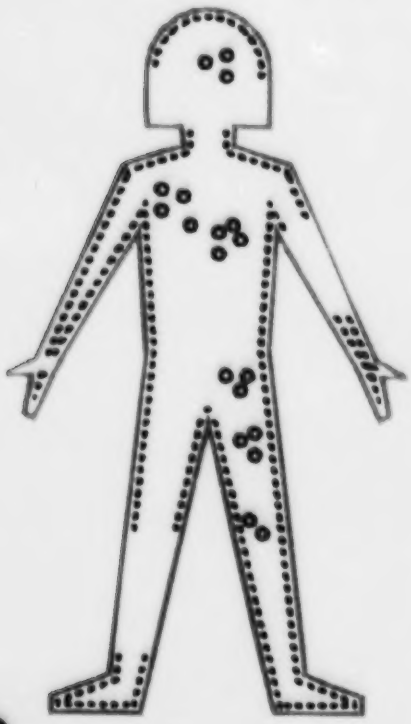
INFECTION RATE FOR BABY
When an HIV-positive woman becomes pregnant, there is a 25-30% chance the baby she is carrying will also be HIV-positive. This may happen when the virus is transmitted through the placenta or during the birthing process.

Pregnant women who are at risk (different sex partners, shared syringes or a blood transfusion prior to 1985) should have the HIV antibody blood test. If detected early, the mother can take a drug called AZT during the pregnancy. This drug will lower the baby's chance of getting infected to about 10%.

Around the world, HIV is usually spread through heterosexual (male/female) sex. Women account for as much as 50% of people infected and that number appears to be growing.

Illustration: Albert McLeod® 1998

CHILDREN AND HIV



MOST TRANSMISSION IS FROM PREGNANT MOM TO BABY

BABIES CAN BE BORN HIV+

BABIES CAN BE INFECTED THROUGH BREAST MILK

CHILDREN CAN BE INFECTED SAME WAY AS ADULTS

SIGNS AND SYMPTOMS ARE NOT THE SAME AS ADULTS

BABIES / CHILDREN CAN DEVELOP AIDS

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CHILDREN AND HIV

The HIVirus can be spread to babies and children.

Most children with HIV infection get the virus from their mothers, either in the womb or during the birthing process. Infected babies can develop AIDS. They can get sick soon after they are born or they can live a long time. For example, one child diagnosed as HIV-infected at 18 months is now in his late teens.

We don't know why some children live a long time without showing any signs of sickness. This means the survival rate will vary. Factors that affect the progress of HIV infection are poor nutrition, an unhealthy environment, limited access to health care and late diagnosis.

Symptoms can be different in children than in adults so they are harder to diagnose. An HIV-infected baby may demonstrate failure to thrive — the baby does not gain weight, hardly moves, doesn't play or develop normally. The baby may have more infections than other children, especially lung infections. Or the child may not display any symptoms for years.

The best way to prevent transmission of the virus to the unborn child is to practice safe sex. Risky behaviour, like having different sex partners or sharing needles, could put you and your unborn child at risk. All pregnant women should have information about HIV and be given an opportunity to have the HIV antibody test.

Children can get the HIV infection the same way adults can — through sex (e.g., sexual abuse) and intravenous drug use. Young people having sex or sharing syringes run the risk of getting infected.

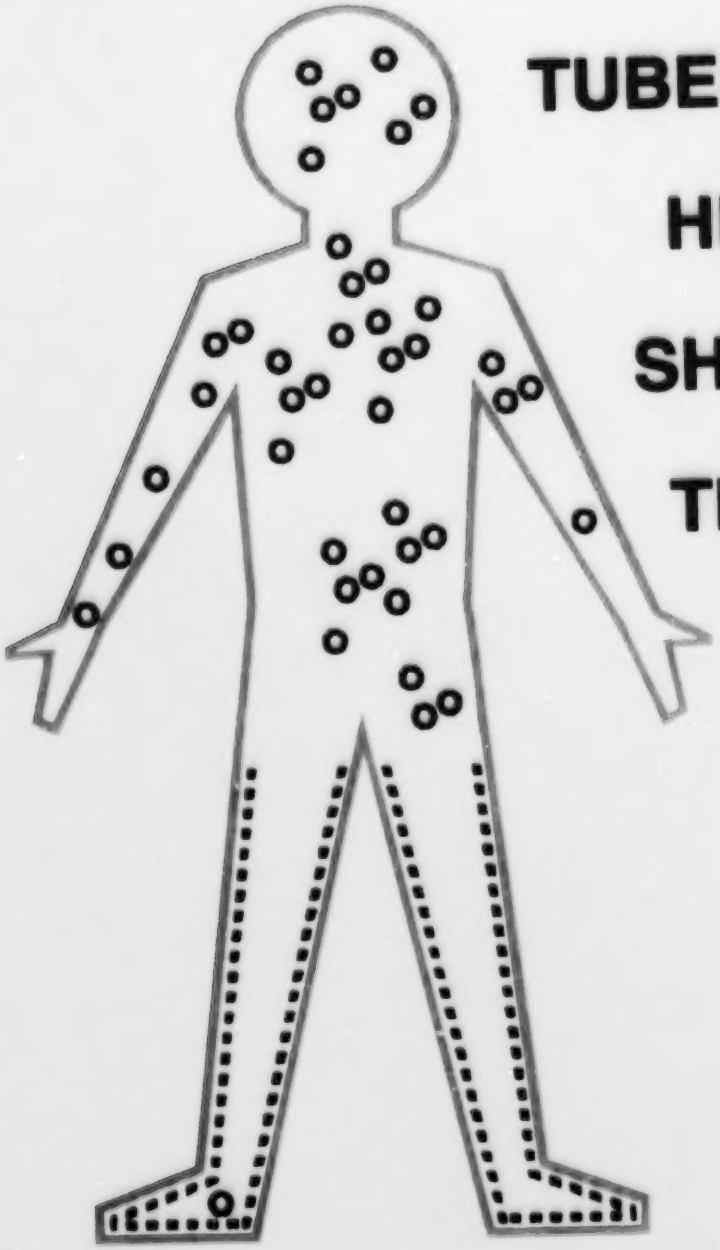
Remember, both mothers and fathers who are or were involved in risky behaviours should consider being tested for HIV. The blood test can be done at a nursing station or in a doctor's office with results available in about two to three weeks.

Remember: age is not a factor!

Developed by the Manitoba Regional AIDS Steering Committee, 1995,
and funded under Health Canada National AIDS, Phase II

OPPORTUNISTIC INFECTIONS

(Infections that occur more often in a person with a lowered immune system)



TUBERCULOSIS

HERPES

SHINGLES

THRUSH

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OPPORTUNISTIC INFECTIONS

Many germs can cause serious infections in people with HIV disease.

This poster shows a more advanced stage of HIV disease. At this point, a person can experience serious health complications. The blue-dotted line has decreased dramatically, which means there are very few immune system cells left to prevent infections. Germs that would not normally be a problem, take advantage of the opportunity created by a weakened immune system to infect the body.

Tuberculosis (TB) - is caused by a germ spread from person to person through coughs, sneezes, etc. Sometimes an old TB infection will start up again because of a weakened immune system. TB is curable, even if you have HIV or AIDS. If you have TB, or your TB has come back, consider having an HIV antibody blood test.

Herpes - is caused by a group of germs called herpes simplex viruses. In the infected area, herpes can cause swelling, cold sores, genital ulcers and pain. Herpes can be infectious to others. The virus stays in the body for years, "breaking out" or "flaring up" at different times. There is currently no cure for the infection, but a drug called Acyclovir can help.

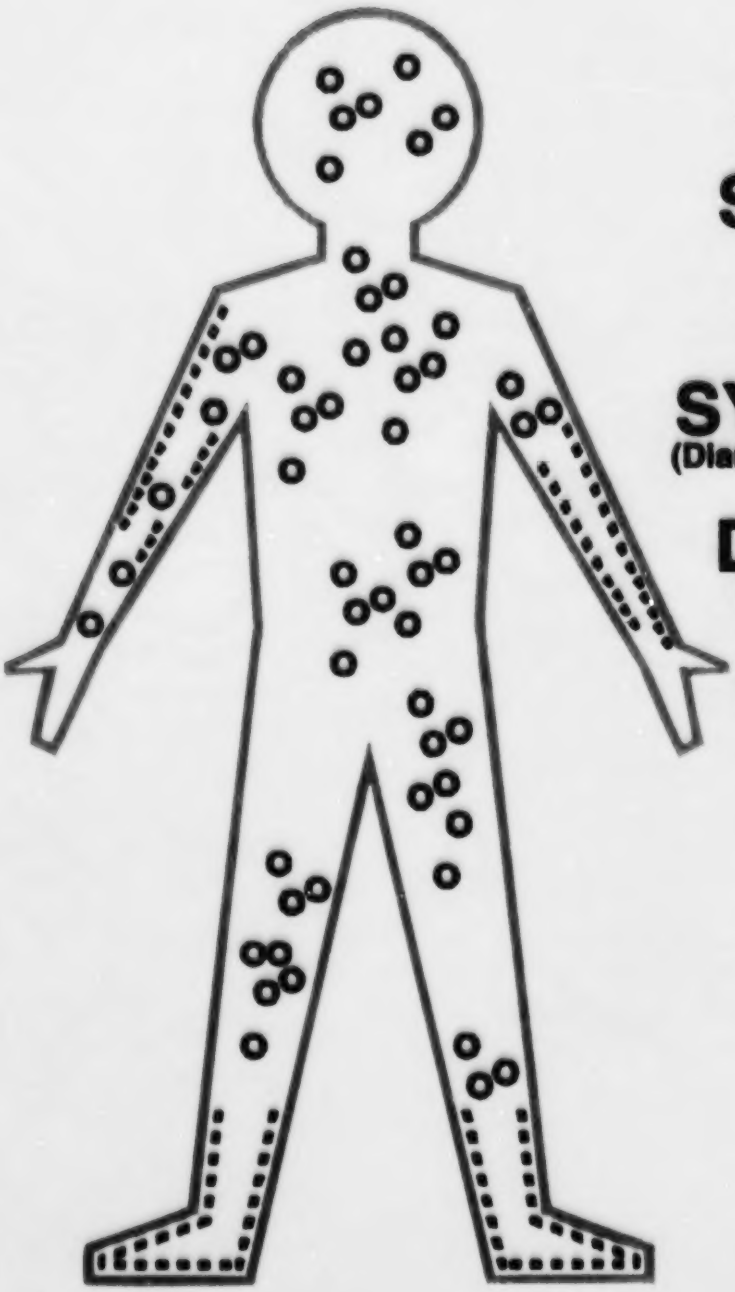
Shingles - is also called herpes zoster. This is a different kind of herpes virus from the one that causes cold sores and genital ulcers. It causes chicken pox in children and is called "shingles" when adults get it. This virus remains inactive until an outbreak is triggered, causing blistering, rashes and pain where the sores are present. If shingles infects the face, some parts may feel painful and some parts numb. If herpes gets into the eyes, serious eyesight problems may develop. Herpes zoster comes and goes on its own; the drug Acyclovir can be taken to speed the healing of symptoms.

Thrush - is caused by a yeast germ called candida. When this germ is found in the mouth or throat, it is usually called "thrush." The symptoms are a sore mouth with thick, white spots or patches in the mouth. Thrush can be treated with drugs such as Nystatin or Ketoconazole.

People at this stage of HIV disease need to know how to prevent these infections. They should attend an HIV clinic or see their doctor regularly to monitor and treat the infections when they occur. They can use drugs called anti-retroviral therapies to slow down the reproduction of HIV. At this stage, a person may be taking combinations of anti-retroviral drugs as well as other drugs to prevent infections.

Illustration: Albert McLeod® 1998

AIDS



PCP
(A type of pneumonia)

KAPOSI'S SARCOMA
(A type of cancer)

WASTING SYNDROME
(Diarrhea and weight loss)

DEMENTIA
(The brain is affected)

RETINITIS
(Inflammation inside the eyeball)

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AIDS

AIDS (Acquired Immune Deficiency Syndrome) is the last stage of HIV disease.

The final stage of HIV disease can last from one to five years. On this poster, the blue-dotted line — the body's protective armour — is almost non-existent, showing that the immune system has been destroyed. The following fatal combination of diseases and complications can occur:

PCP (Pneumocystis Carinii Pneumonia) - A disease found in people with damaged immune systems. PCP is caused by a germ called Pneumocystis carinii. This germ is so common that most people have come in contact with it by the time they are four years old. It causes illness only when the immune system is badly damaged. PCP is most common in people with AIDS. It can be treated and most people survive the first infection. But, with each new round of pneumonia, the body has a harder time recovering.

Kaposi's Sarcoma (KS) - A type of skin cancer that causes tumours and lesions. Though not all people with AIDS get KS, those who do will usually first notice blotches on the skin that can spread slowly or quickly. In people with dark skin, the blotches are usually a little darker than the skin surrounding them.

Wasting Syndrome - Caused by diarrhea or loss of appetite causing weight loss. The diarrhea can last for days, weeks or months. An infected person can lose a lot of weight without trying. The body starts to look very thin.

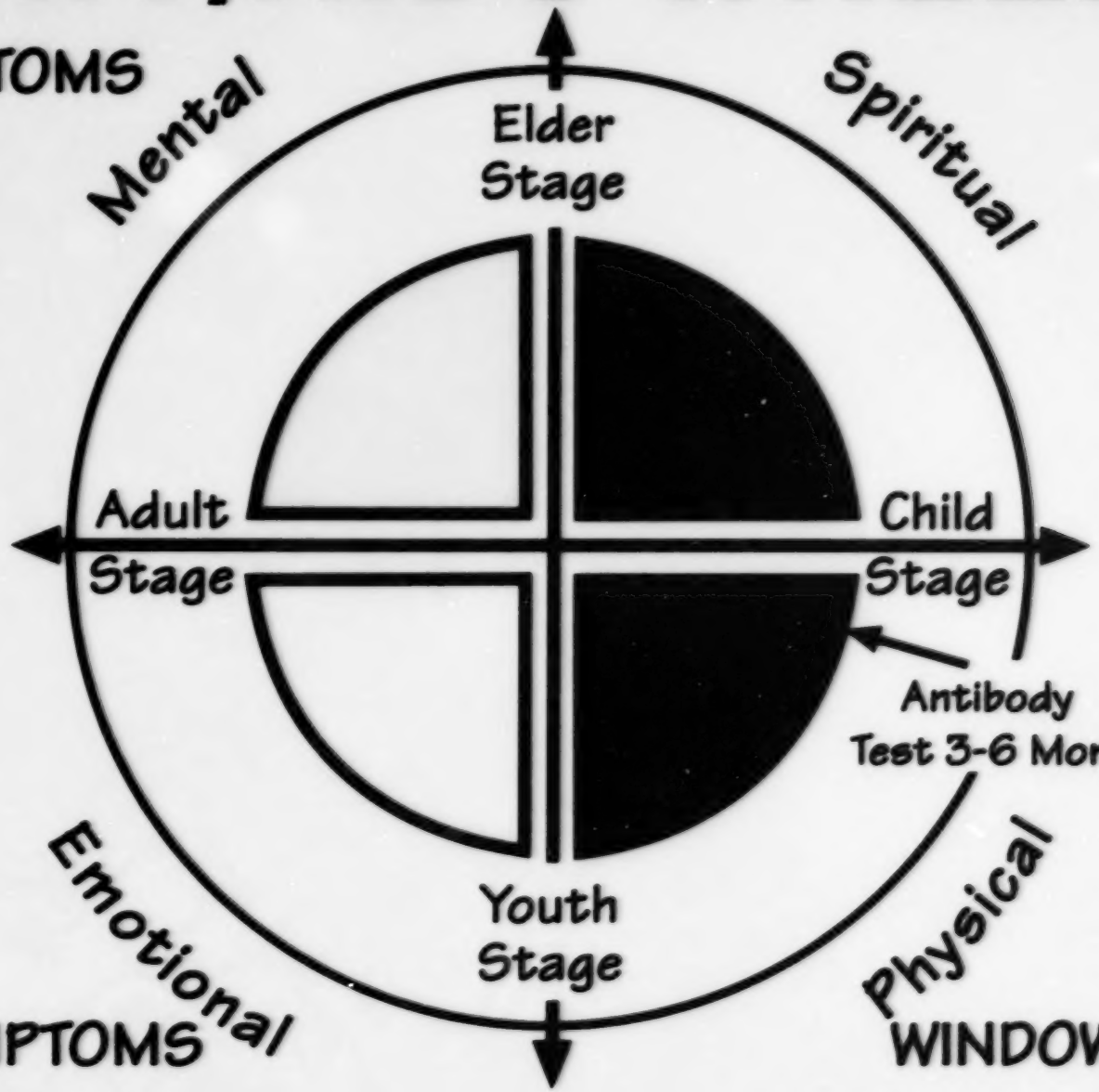
Dementia - When a person loses the ability to think, reason, or remember because of a disease of the brain. Sometimes the lost skills do not return. About one-third of people with AIDS, usually those who are very ill, have this problem.

Retinitis - Swelling of the retina of the eye. The retina is the layer inside the eyeball that takes in the light rays. People with retinitis will feel some eye pain and have trouble focusing. Retinitis in people with AIDS can be caused by HIV or by Kaposi's Sarcoma cancer. Some eye drops and drugs can help. Once the symptoms start, they need to be treated, otherwise infected people can lose some or all of their eyesight.

There is no cure for AIDS.

Illustration: Albert McLeod© 1988

HIV/AIDS WHEEL



HIV/AIDS WHEEL

Posters one to eight explain the medical stages of HIV disease. There are other ways to look at the disease and how it progresses.

In 1993, a man living with AIDS developed the HIV/AIDS wheel to promote a holistic understanding of HIV disease. The wheel incorporates the medical knowledge of HIV disease into a cycle of life stages and states of being. These elements speak to the inter-connected relationships and forces within our environment.

The Medicine Wheel, drawn from Aboriginal culture, provides a reminder and an opportunity for health care professionals, persons living with AIDS, their family members and others to recognize the emotional, spiritual and social aspects that influence, and are influenced by this disease. Emotional and spiritual considerations can greatly affect one's ability to cope with the disease.

CHILD STAGE

Clinical: The "window period" begins immediately after a person is infected with HIV and can last for three to six months. During this time, it is difficult to detect HIV with an HIV antibody blood test because the immune system may not yet have produced enough antibodies to produce a positive test result.

Colour: Red represents blood, the source of life and also the target of HIV.

Direction: East represents the place where all things begin, as in the rising of the sun each day. Here, HIV enters into the cycle of a person's life experience.

Phase: The "physical" phase represents the invasion of HIV into the blood system (sero-conversion) and the body's response.

YOUTH STAGE

Clinical: This is the stage when an HIV-positive person has no symptoms of HIV infection. It can last 10 or more years.

Colour: Black represents darkness. Negativity, fear, shame and anger are common reactions to an HIV diagnosis.

Direction: South represents learning and exploration.

Phase: The "emotional" phase relates to how a person may feel in dealing with an HIV diagnosis. The person may experience a roller-coaster ride of emotions as they cope with issues of confidentiality, disclosure and counselling.

ADULT STAGE

Clinical: This is the stage when an HIV-positive person begins to show symptoms of HIV disease.

Colour: White represents light, balancing the "darker" aspects of living with HIV/AIDS. It also represents hope, knowledge and acceptance of an HIV diagnosis.

Direction: West represents knowledge and growth.

Phase: The "mental" phase is a time when an HIV-positive person will make important decisions about treatment, disclosure, living wills, work and other important considerations.

ELDER STAGE

Clinical: AIDS is a medical term that defines the end stage of HIV disease. The immune system can no longer fight infections and diseases, resulting in the death of the infected person.

Colour: Yellow represents the sun, the giver of life.

Direction: North represents healing, acceptance and closure.

Phase: The "spiritual" phase is a time when a person with AIDS is confronted by the nearness of death. As the physical body weakens, the need for spirituality may grow stronger. As death approaches, this may be a time of healing with family, resolving old issues and finding closure.

Source: Healing Our Spirit BC First Nations AIDS Society 1993.

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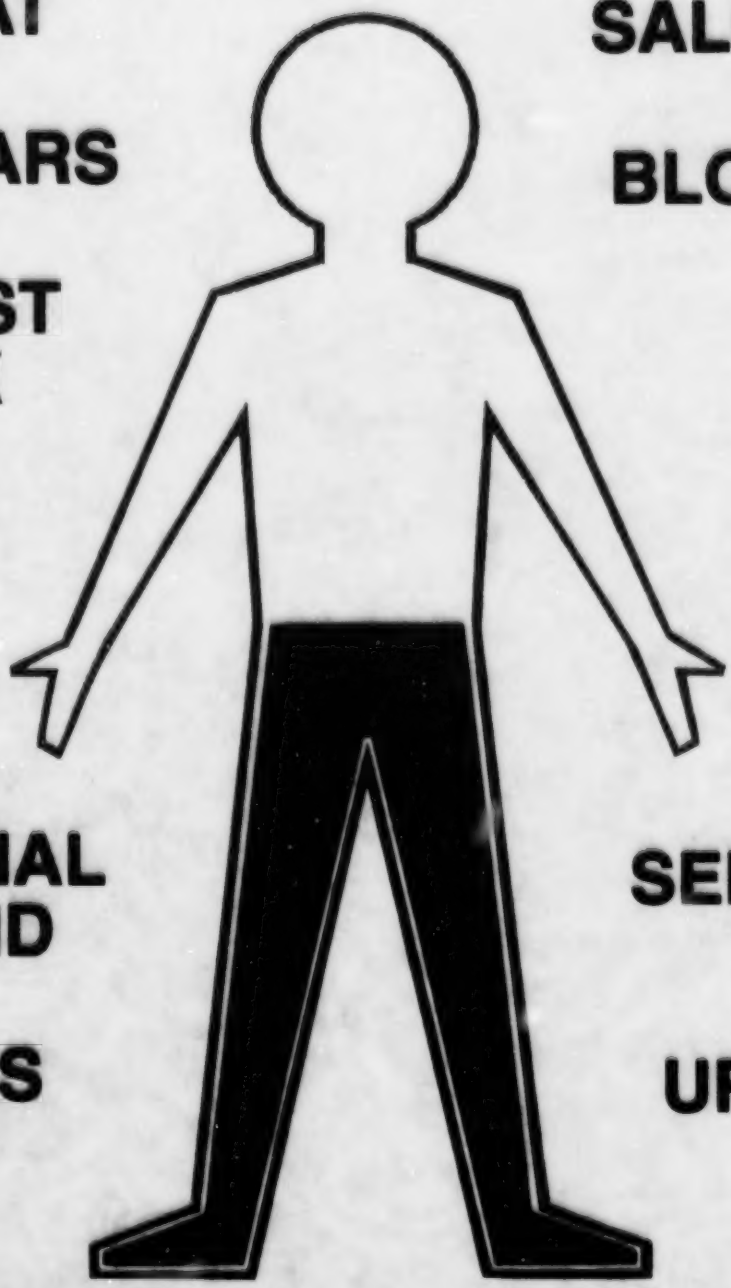

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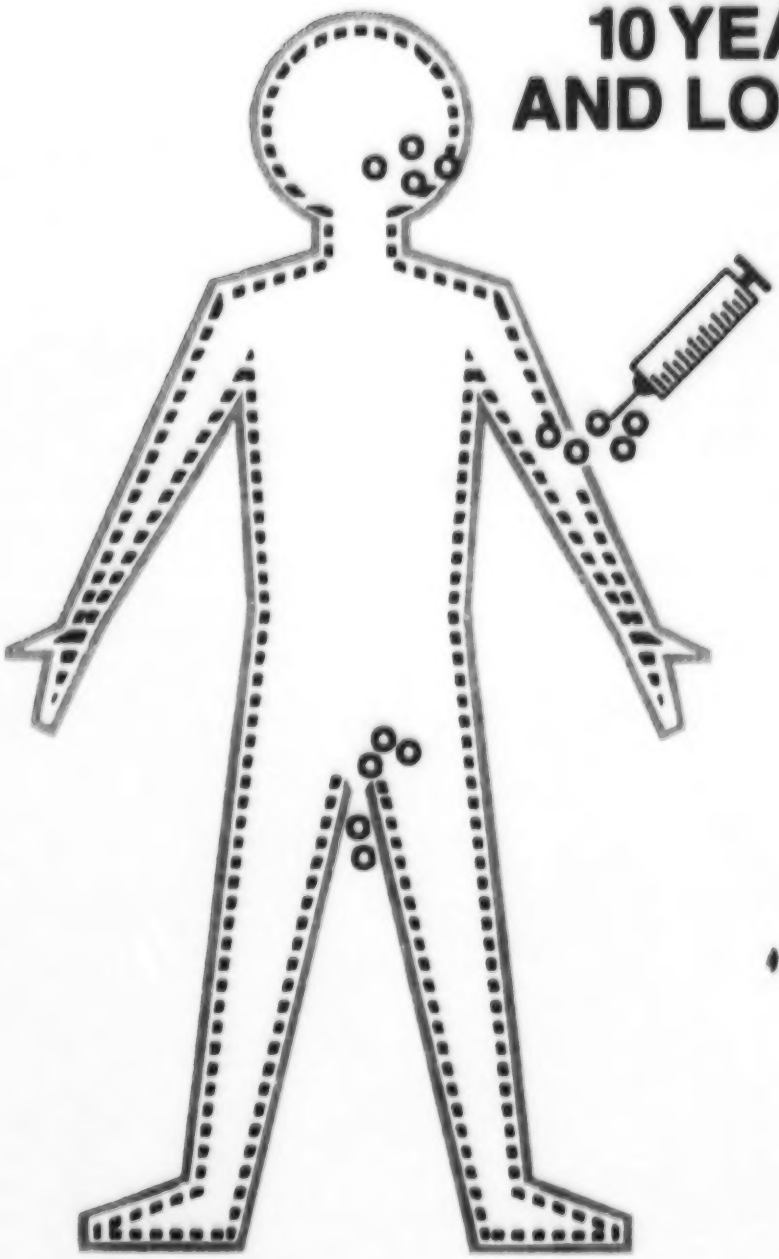

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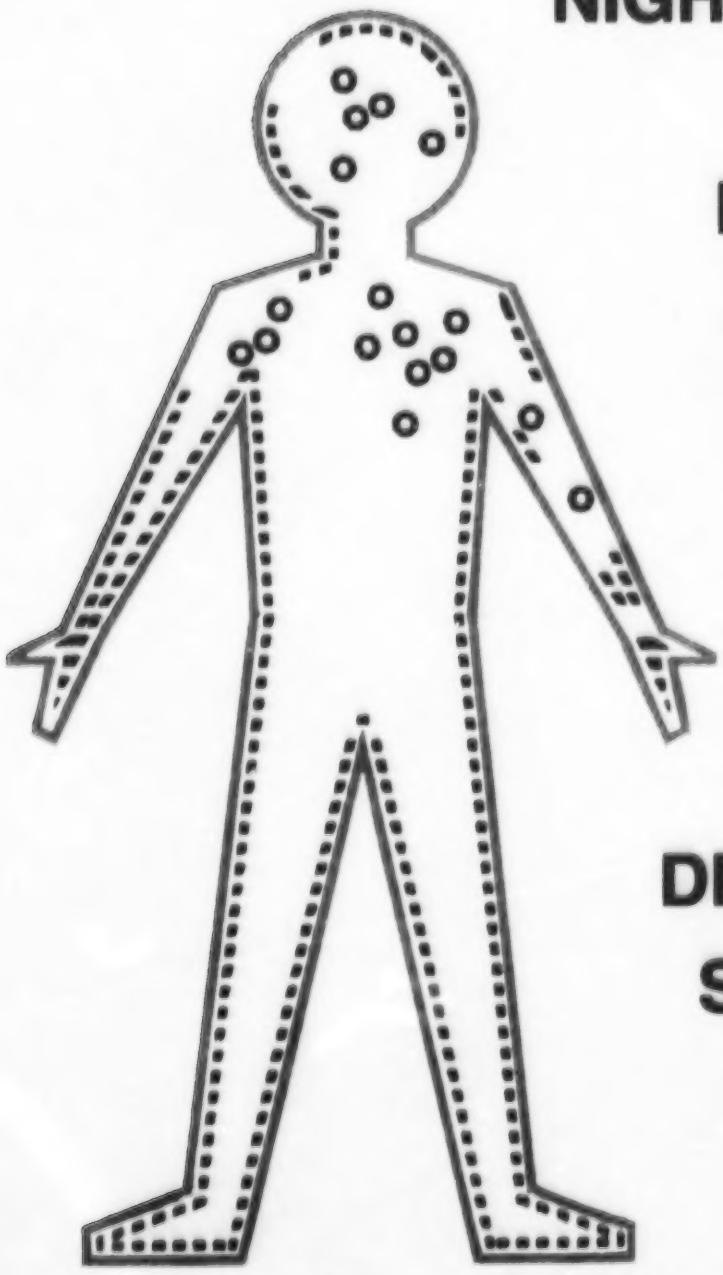
HIV INFECTION



NIGHT SWEATS

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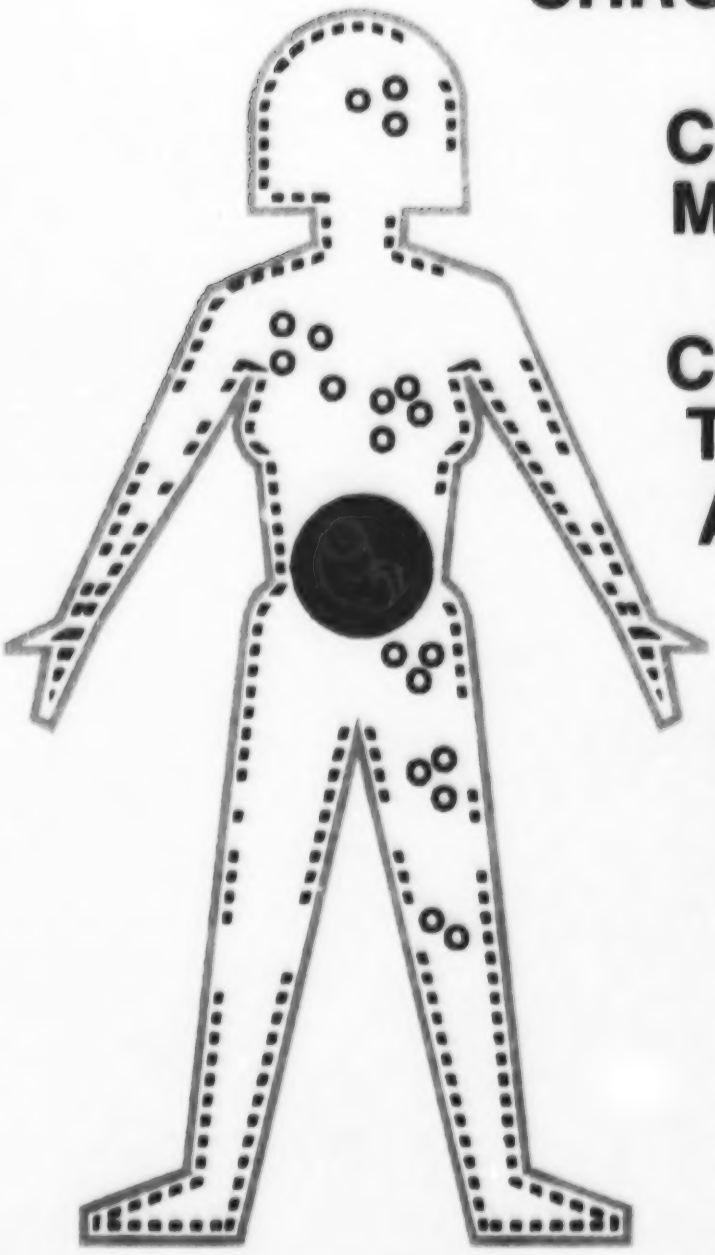
WOMEN AND HIV



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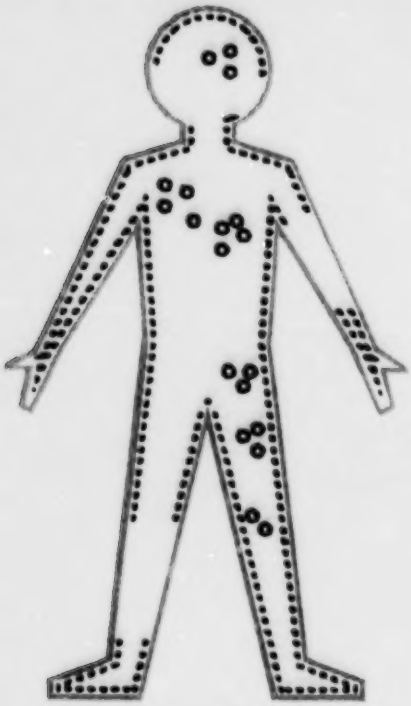

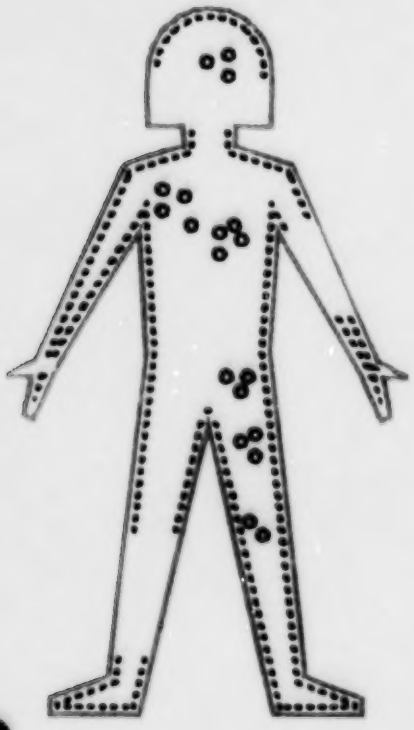

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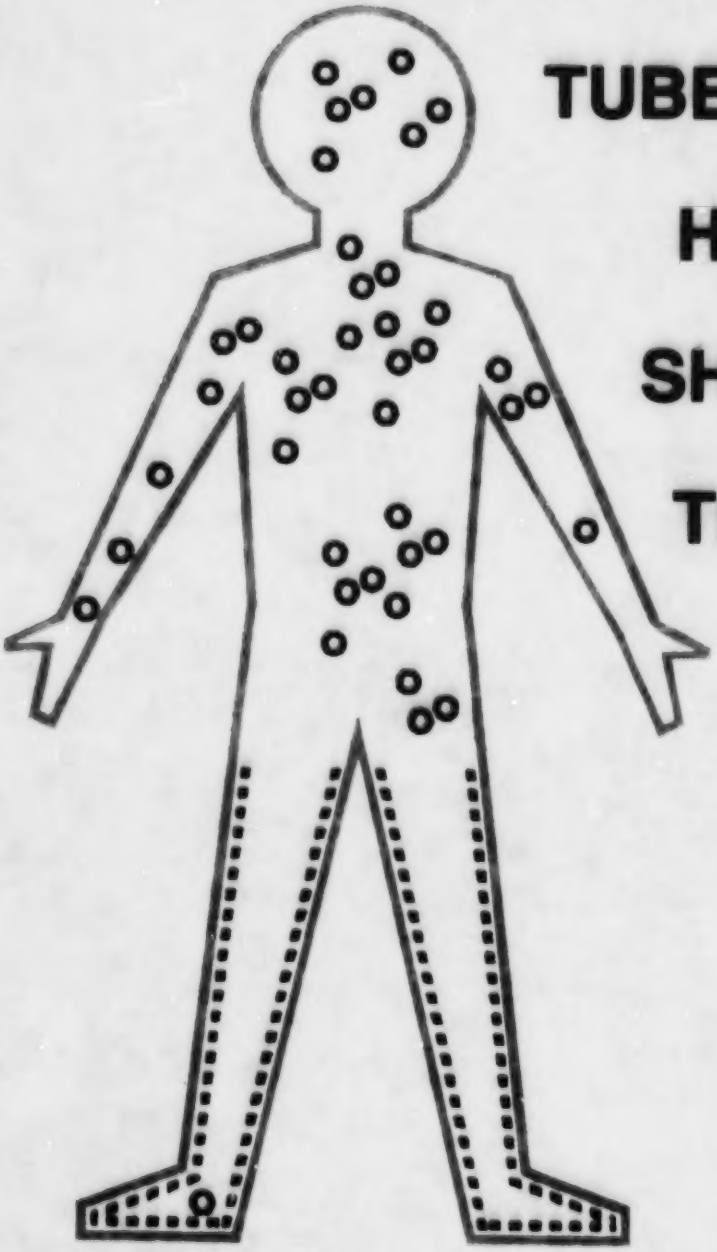

TUBERCULOSIS

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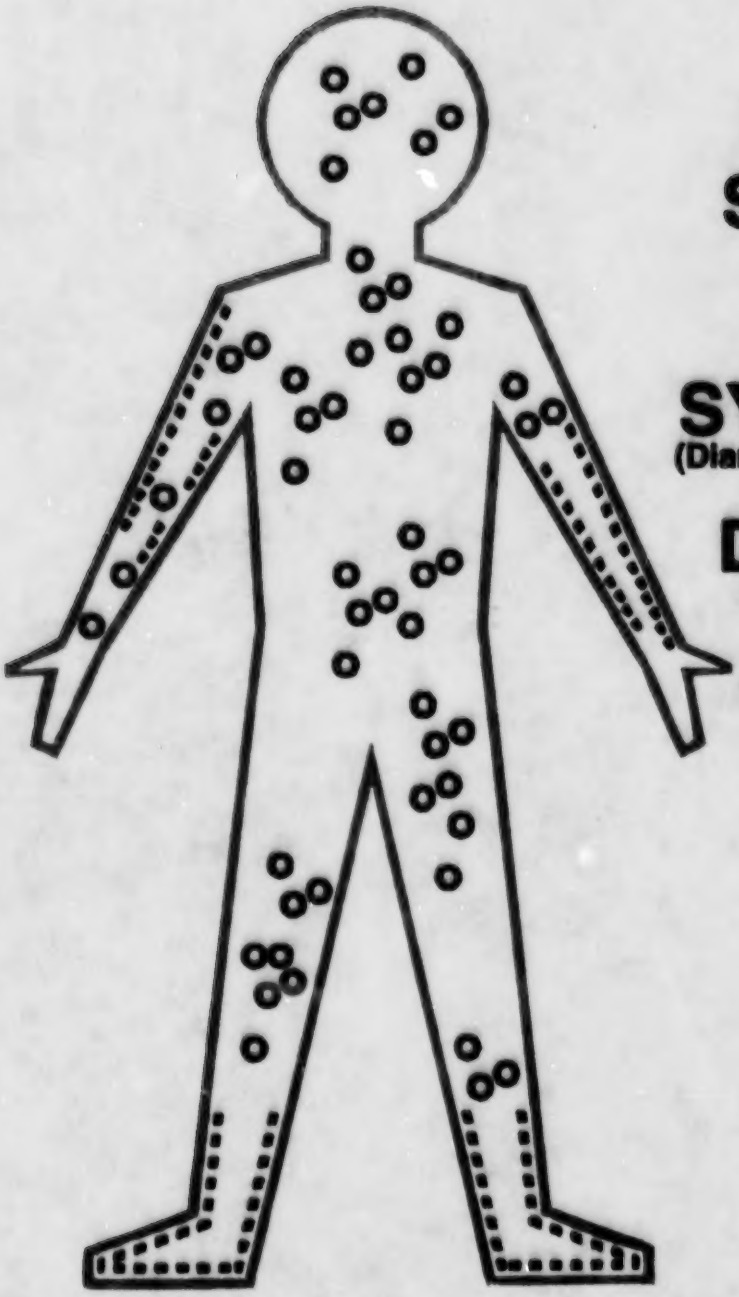

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